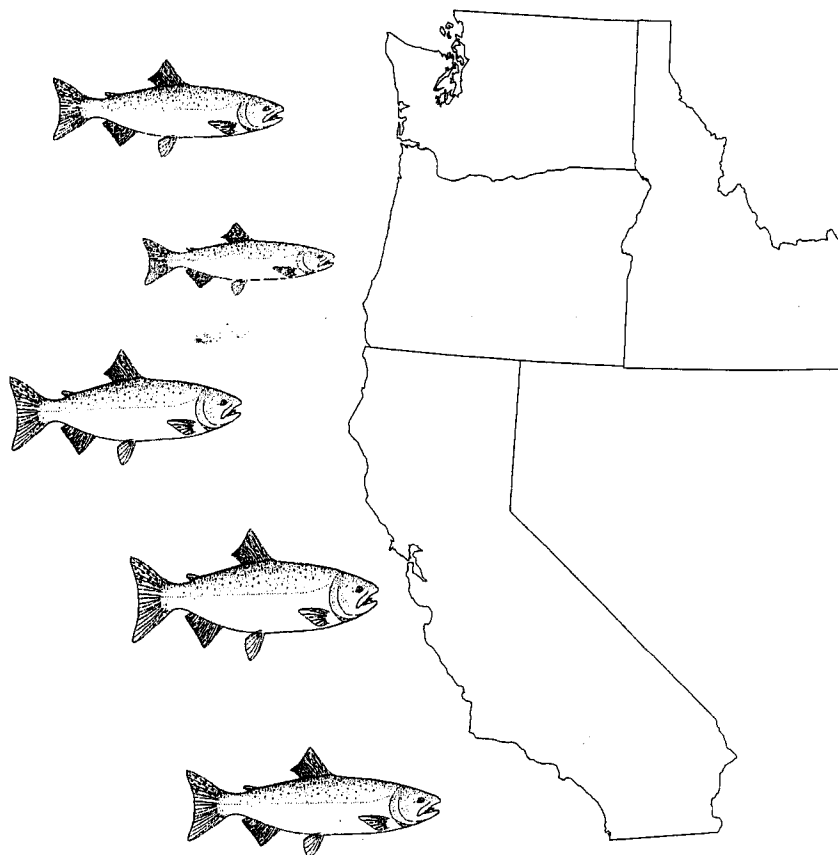


PRESEASON REPORT III

**ANALYSIS OF COUNCIL ADOPTED MANAGEMENT MEASURES
FOR 2003 OCEAN SALMON FISHERIES**

**PREPARED BY THE
SALMON TECHNICAL TEAM AND COUNCIL STAFF**



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LIST OF ACRONYMS AND ABBREVIATIONS

AEQ	Adult equivalent exploitation rate
CDFG	California Department of Fish and Game
Council	Pacific Fishery Management Council
CWT	coded-wire tag
EA	Environmental Assessment
EIS	Environmental Impact Statement
ESA	Endangered Species Act
ESU	evolutionarily significant unit
FMP	fishery management plan
FR	<i>Federal Register</i>
FRAM	Fishery Regulation Assessment Model
KFMC	Klamath Fishery Management Council
KMZ	Klamath management zone
KOHM	Klamath River Ocean Harvest Model
LRH	lower river hatchery (tule fall chinook returning to hatcheries below Bonneville Dam)
MCB	Mid-Columbia River brights (hatchery bright fall chinook released in the mid-Columbia River)
MSP	Maximum sustainable production
MSY	Maximum sustainable yield
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
ODFW	Oregon Department of Fish and Wildlife
OCN	Oregon coastal natural (coho)
PFMC	Pacific Fishery Management Council
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
RK	Rogue/Klamath (hatchery coho)
SCH	Spring Creek Hatchery (tule fall chinook returning to Spring Creek Hatchery)
SAS	Salmon Advisory Subpanel
SOC	South of Pt. Arena, California, fishery impact cell of the KOHM
SRFI	Snake River fall (chinook) index
STT	Salmon Technical Team
URB	upper river brights (bright fall chinook normally migrating past McNary Dam)
WCVI	West Coast Vancouver Island
WDFW	Washington Department of Fish and Wildlife

INTRODUCTION

This is the last in a series of three preseason reports prepared by the Pacific Fishery Management Council's (Council) Salmon Technical Team (STT) and staff. The reports document and help guide salmon fishery management in the exclusive economic zone from three to 200 nautical miles off the coasts of Washington, Oregon, and California, and within state territorial waters. This report summarizes the STT analysis of the 2003 ocean salmon fishery management measures adopted by the Council for submission to the U.S. Secretary of Commerce. A biological evaluation of expected impacts on stocks listed under the Endangered Species Act (ESA) is included in Appendix A. An environmental assessment of the proposed management measures has also been prepared (Council 2003).

ADOPTED MANAGEMENT MEASURES

The Council's recommendations for the 2003 ocean salmon fishery regulations meet or exceed the objectives of the *Pacific Coast Salmon Plan* (Salmon FMP), obligations under the Pacific Salmon Treaty (PST), and the level of protection required by all consultation standards for salmon species listed under the ESA. The following figures and tables describe the 2003 Council-adopted management measures:

- Table 1 - Non-Indian commercial ocean salmon management measures, pages 7-10;
- Figure 1 - geographic outline of commercial troll (non-Indian) ocean salmon seasons, page 11;
- Table 2 - recreational ocean salmon management measures, pages 12-15;
- Figure 2 - geographic outline of recreational ocean salmon seasons, page 16;
- Table 3 - treaty Indian commercial ocean management measures, page 17; and
- Table 4 - allowable catch quotas for chinook and coho, page 18.

In addition, Tables 5, 6, and 7 provide information on the biological impacts and landing estimates for the Council's management recommendations. Table 8 displays the expected mark (healed adipose fin clip) rate for coho encountered in mark-selective fisheries. Tables 9 and 10, and Figures 3 and 4 provide information on the economic impacts of the proposed fisheries.

The 2003 seasons are constrained primarily by (1) endangered Sacramento River winter chinook south of Point Arena, (2) threatened California Coastal chinook south of Cape Falcon, (3) Klamath River fall chinook south of Cape Falcon; (4) threatened Lower Columbia River Natural Tule chinook north of Cape Falcon, and (5) management goals for naturally produced coho salmon over the entire Council management area, including Oregon and California coastal stocks, which are listed as threatened under the ESA, and Puget Sound and Interior Fraser (B.C.) coho which are subject to provisions of the PST. Constraints for threatened Snake River fall chinook were not a limiting factor in 2003, primarily because of continued restrictions in Canadian fisheries. Both recreational and non-Indian commercial coho retention fisheries are again mark-selective fisheries for coho with healed adipose fin clips. The 2003 season is the Council's fifth year of extensive mark-selective coho fisheries.

Regulations and expected fishing patterns for the treaty-Indian troll fisheries were developed by the Hoh, S'Klallam, Makah, Quileute, and Quinault tribes for their respective fisheries. The Council recommendations include continuation of the encounter rate study to be conducted by the Makah Tribe in the Cape Flattery area. The purpose of the study is to estimate encounter rates of chinook and coho salmon during troll fisheries directed at each species. All fish with clipped adipose fins will be retained and fish that are taken during periods when the treaty troll fishery is operating will be counted towards the treaty troll quota.

INSEASON MANAGEMENT

Some management measures may be modified through inseason action by NMFS after consultation with the Council Chair, affected management agencies, and pertinent tribes and public (e.g., changing the days or number of days of recreational fishing allowed per calendar week; or modifying open areas, quotas, bag limits, and species retention limits). Inseason changes must meet the Council's salmon fishery management plan (Salmon FMP) goals, especially in regard to conservation and allocation goals and federally-recognized Indian fishing rights.

It is anticipated that the Oregon Department of Fish and Wildlife (ODFW) will permit late-season, chinook-only fisheries in certain areas within state waters in addition to the seasons shown in Tables 1 and 2. Potential seasons include commercial and recreational fisheries at the mouths of the Chetco and Elk Rivers and at the mouth of Tillamook Bay. The State of Washington may also establish limited recreational fisheries in state waters if additional impacts on critical coho and/or chinook stocks can be accommodated within management constraints.

Council intent generally advocates that state-water fisheries have the same basic regulations as adjacent federal waters, particularly if open simultaneously; however, the Oregon State-water fishery off Tillamook Bay may allow the use of barbed hooks to be consistent with inside regulations.

NEW MANAGEMENT MEASURES

South of Cape Falcon

Commercial Measures

A moderate abundance of Klamath River fall chinook and an increase in the acceptable exploitation rate on Oregon Coastal Natural (OCN) coho over that permitted in 2002 allowed for an expansion of chinook commercial fishing opportunity in the Horse Mountain to Point Arena area, including a full month of opportunity in May, August, and September, and twenty-six days in July.

Greater than expected harvest of Klamath River fall chinook in the Cape Falcon to Humbug Mountain area occurred in the September–October 2002 commercial fishery. Those impacts were counted towards the 2003 allowable harvest of Klamath River fall chinook. This harvest, coupled with the Council's Salmon Advisory Subpanel's recommended sharing of Klamath River fall chinook ocean commercial harvest between the States of Oregon and California, lead to seasonal closures in portions of July and August as well as minimum size limit changes in the chinook commercial fishery off Oregon.

Recreational Measures

A moderate abundance of Klamath River fall chinook and an increase in the acceptable exploitation rate on OCN coho over that permitted in 2002 also allowed for an expansion of recreational fishing opportunity in the Humbug Mountain to Point Arena area (Klamath Management Zone [KMZ]), including a full month of opportunity in July.

North of Cape Falcon

A Grays Harbor control zone was put in effect for both the commercial and recreational fisheries beginning August 16 to provide additional protection for Grays Harbor fall chinook. This stock has not met its spawning escapement objective since 1997, but is not impacted significantly by Council area fisheries.

Commercial Measures

To protect threatened Puget Sound chinook stocks, the Cape Flattery Control Zone is in effect during all non-Indian commercial fisheries.

Recreational Measures

To protect threatened Puget Sound chinook stocks, retention of chinook is allowed in Area 4B east of the Bonilla-Tatoosh line only during the month of July while the ocean fishery is open in Area 4 (Neah Bay area west of the Bonilla-Tatoosh line and north of Cape Alava). Tillamook Head to Cape Falcon closes August 1 to reduce impacts on the northern component of threatened OCN coho.

The chinook minimum size limit was increased to 26 inches to extend the length of the chinook retention season. The bag limit for 2003 is two fish, no more than one of which may be a chinook, and for areas north of the Queets River, one additional pink salmon may be retained.

The most significant changes from 2002 regulations include no all-salmon-except-coho recreational fishery in May and June, and earlier opening dates for all salmon recreational fisheries in the summer.

ESTIMATED SALMON STOCK IMPACTS OF ADOPTED MANAGEMENT MEASURES

Procedures and assumptions employed in the evaluation of regulatory impacts are reviewed and maintained by the STT. In modeling non-retention and mark-selective fishery impacts, the Council has adopted hook-and-release mortality (HRM) rates of 26% for the commercial fishery, 14% for recreational fishery north of Pt. Arena, California, and 23% for the recreational fishery south of Pt. Arena. The HRM rate of 14% for the recreational fishery north of Pt. Arena was adopted in 2001 and is the result of a comprehensive review by the STT. The HRM rate of 23% for the recreational fishery south of Pt. Arena is based on the proportion of mooching and trolling gear used in the fishery during 2002, and the HRMs of 42.2% and 14% for these two respective gear types. In addition, a drop-off mortality impact is applied to all fisheries. Generally this impact is calculated as 5% of the total encounters.

CHINOOK SALMON ASSESSMENT

Ocean chinook harvest quotas are summarized in Table 4. Table 5 lists expected escapements and other key chinook management criteria, including allocation of Klamath River fall chinook and data relevant to meeting consultation standards for ESA listed stocks. Expected ocean harvest and incidental non-retention mortality are provided in Table 6. Further details of fishery impacts on stocks listed under the ESA are provided in Appendix A.

South of Cape Falcon

Considerations in shaping the chinook fisheries in this area include the protection of ESA listed Sacramento River winter and California Coastal chinook (Appendix A) and achievement of fall chinook spawning escapement goals for the Klamath, Sacramento, and Oregon coastal rivers. In 2003, chinook fisheries in this area were constrained primarily to satisfy the ESA consultation standards for California Coastal chinook and Sacramento River winter chinook (Table A-3), and the Klamath River fall chinook harvest allocation objectives (Table 5).

U.S./Mexico Border to Horse Mountain

Central Valley (primarily Sacramento River) fall chinook is the Council's primary management unit in this area. Under the adopted management measures, the projected spawning escapement for Sacramento River fall chinook is 517,000 adult fish. This is well above the spawner escapement goal range of 122,000 to 180,000 hatchery and natural fall chinook adults combined. Ocean commercial and recreational fisheries in this area are expected to land 460,100 and 153,200 chinook, respectively; a 23% increase over the 2002 commercial landings, and a similar recreational harvest to that observed in 2002 (Table 6).

Horse Mountain to Humbug Mountain

This area is designated as the KMZ because the primary stock of concern is Klamath River fall chinook. Ocean escapement of Klamath River fall chinook to the Klamath River in 2003 is projected to be 113,200 adults. After river tribal and recreational fishery impacts, the total number of spawners is expected to be 57,200 adults, of which 35,000 are expected to spawn in natural areas.

Management constraints for Klamath River fall chinook usually affect the shaping of many fisheries from central Oregon to central California, as well as inside tribal and recreational fisheries. Therefore, the Council, with assistance from the Klamath Fishery Management Council (KFMC), identifies several specific adult harvest allocation objectives for this stock (Table 5). The Council's proposed regulations allocate:

- 50% (41,400 fish) of the available harvest to the Indian tribes of the Klamath-Trinity River Basin with federally recognized fishing rights (Yurok and Hoopa Valley tribes);
- 26.1% (10,800 fish) of the non-Indian harvest to the Klamath River recreational fishery;
- 73.9% (30,600 fish) of the non-Indian harvest to the ocean fisheries;
- 14.8% (4,500 fish) of the ocean harvest allocation to the KMZ recreational fishery; and
- 50.9% and 49.1% (12,300 and 11,900 fish) of the ocean commercial harvest to the states of California and Oregon, respectively.

Ocean commercial and recreational fisheries in the KMZ area are expected to land 21,100 and 38,100 chinook (all stocks), respectively; a similar commercial harvest to that observed in 2002, and a 47% increase over the 2002 recreational landings (Table 6).

Humbug Mountain to Cape Falcon

The primary chinook stocks of concern for this area originate in northern California and Oregon coastal river systems. Sacramento River fall chinook also contribute significantly to the harvest. The ocean escapement of these stocks in 2003 is expected to be sufficient to provide for estuary and freshwater fisheries and meet spawner escapement goals (Table 5).

Chinook impacts in this area are primarily associated with the commercial fisheries as recreational fishing effort is generally focused on coho. Recreational coho fishing was closed from 1994 to 1998 and reopened to limited mark-selective harvest of coho with a healed adipose fin clip in 1999. For 2003, the commercial chinook fishery opened March 15 and continues through October 31, with closed periods in July and August and increases to the minimum size limits. The closures and size limit changes were necessary to meet the Council's Salmon Advisory Subpanel's recommended sharing of Klamath River fall chinook ocean commercial harvest between the States of Oregon and California. Additionally, the closure of two days at the end of August assists in accurately accounting for Klamath River fall chinook impacts occurring prior to September 1. After August, most mature fall chinook in this area are no longer available to ocean fisheries and impacts at that time primarily affect ocean escapement in the following year. Ocean harvests after September 1 are counted against the allowable harvest for the following year. Thus, the increased size limits in the September–October period should reduce the Klamath River fall chinook harvest counted toward the 2004 allowable harvest and allocation of these fish. As in recent years, commercial troll gear restrictions have also been recommended to reduce coho impacts (Table 1).

North of Cape Falcon

Management objectives for chinook fisheries in this area are to comply with consultation standards established for ESA-listed stocks, meet treaty Indian sharing obligations, and to the extent possible, provide for viable ocean and inriver fisheries while meeting hatchery fall chinook brood stock needs. Lower Columbia River and Bonneville Pool hatchery fall chinook have historically been the major contributors to ocean fishery catches in the Council area north of Cape Falcon. Management constraints for ESA-listed stocks, especially

Lower Columbia River Natural tules, constrained ocean fisheries in this area. NMFS consultation standards for ESA-listed stocks are expected to be met for all stocks.

The 2003 non-Indian chinook quotas in this area provide for landings of 64,400 in the commercial troll and 59,600 in the recreational fisheries. The 2002 actual non-Indian chinook landings were 81,579 in the commercial troll and 60,555 in the recreational fishery..

The treaty-Indian commercial troll fishery will be constrained by a quota of 60,000 chinook in ocean management areas and Area 4B combined (Table 3). The landings result from a chinook-directed fishery in May and June (under a quota of 30,000 chinook) and the all-salmon season beginning in July with a 30,000 chinook quota. There is no roll-over of any chinook that are not harvested during the May-June chinook-directed fishery. The 2003 quota is unchanged from the 2002 quota level. The 2002 observed chinook harvest was 39,100 (Table 6).

COHO SALMON ASSESSMENT

Ocean coho harvest quotas are summarized in Table 4. Table 5 lists expected escapements and other key coho management criteria, including data relevant to meeting consultation standards for ESA- listed stocks. Expected coho harvest and incidental non-retention mortality are shown in Table 6. Table 7 provides a detailed accounting of impacts on OCN and Rogue/Klamath (RK) hatchery coho by fishery. Further details of the fishery impacts on stocks listed under the ESA can be found in Appendix A. Table 8 provides estimates of the percentage of marked coho expected to be encountered in mark-selective fisheries.

South of Cape Falcon

All natural coho stocks produced south of Cape Falcon are listed under the federal ESA. Allowable coho harvest impacts in this area are based on meeting NMFS ESA consultation standards for three separate evolutionarily significant units (ESUs) of threatened natural Oregon and California coastal coho (Appendix A). NMFS guidance requires that the three northern OCN coho stock components (the northern-most ESU) be managed in accordance with Amendment 13 of the salmon FMP and the OCN Coho Work Group 2000 report (adopted by the Council as "expert biological advice to help guide Council management of OCN coho"). For this ESU in 2003, both the Work Group report and exploitation rate matrix in Amendment 13 require that the exploitation rate in marine and freshwater fisheries combined be no more than 15%. For the Southern Oregon/Northern California Coastal coho ESU in 2003, the NMFS consultation standard requires that the ocean exploitation rate on RK hatchery stocks be no more than 13%. For the Central California Coastal coho ESU in 2003, the NMFS consultation standard prohibits retention of coho in California ocean fisheries.

Under the adopted recommendations, the combined marine and freshwater OCN coho exploitation rate is projected to be 14.4% (Table 7). The number of OCN coho spawners in 2003 is projected to be 101,500 adults. This compares with 264,300 adults observed in 2002. The marine exploitation rate for RK hatchery coho is projected to be 9.6%. At present, there are no preseason spawner projections for either the Southern Oregon/Northern California Coastal or Central California Coastal coho ESUs. Ocean escapement of the early and late hatchery stocks of Columbia River coho are expected to be sufficient to meet hatchery egg-take goals (Table 5).

Coho retention is prohibited for the commercial and recreational fisheries south of Cape Falcon, except for a mark-selective recreational fishery of 88,000 coho with healed adipose fin clips between Cape Falcon and Humbug Mountain opening June 21 and closing no later than August 24. In 2002, the mark-selective fishery was limited to 22,500 coho with healed adipose fin clips.

In addition to the recreational quota for 88,000 coho marked with healed adipose fin clips, the estimated non-retention (drop-off plus hook-and-release) mortality for non-Indian ocean commercial and recreational fisheries in the area south of Cape Falcon is 16,700 and 22,700 coho, respectively (Table 6).

North of Cape Falcon

Coho fisheries north of Cape Falcon are constrained by management objectives and treaty-Indian obligations for individual stock management units. For 2003, NMFS guidance and the Council's Salmon FMP limit the exploitation rate on ESA listed OCN coho in marine and freshwater fisheries combined to 15% or less. Additionally, ocean and Puget Sound fisheries were structured to constrain total exploitation rates on Interior Fraser coho below 10% in accordance with the provisions of the southern coho management plan adopted by the Pacific Salmon Commission in February, 2002. Ocean escapements for the pertinent coho stocks under the proposed regulations are presented in Table 5. Ocean escapement levels for all natural coho stocks north of the Columbia River are expected to meet or exceed their long-term spawner escapement goals or the management objectives adopted by state and tribal co-managers. The actual spawner escapements will be determined by the combined impact of ocean and inside fisheries. Management objectives in 2003 for these stocks have been agreed to by state and tribal co-managers under the terms of pertinent U.S. District Court orders. Ocean escapements of early and late Columbia River hatchery stocks are projected to be sufficient to meet normal egg-take goals, treaty Indian obligations, and to allow some harvest opportunity in non-Indian fisheries.

For 2003, retained coho in all non-Indian troll and recreational ocean fisheries north of Cape Falcon must have healed adipose fin clips. Non-Indian commercial and recreational fisheries in this area will be constrained by coho quotas of 75,000 and 225,000 fish with healed adipose fin clips, respectively. The total allowable harvest by the non-Indian commercial and recreational fisheries for coho in 2003 is 300,000, compared to 140,000 in 2002. The 2002 non-Indian commercial and recreational catches of coho were 1,695 and 88,503, respectively (Table 6).

The coho quota for the treaty-Indian troll fishery in ocean management areas, including Washington State statistical area 4B for the May to September period, is 90,000 coho, a significant increase from the 2002 quota of 60,000. Actual catch in 2002 was estimated at 17,500 coho.

SOCIOECONOMIC IMPACTS OF PROPOSED REGULATIONS

This section provides economic impact estimates for expected non-Indian fishing activities under the Council's proposed ocean commercial and recreational fishery regulations. Economic costs and benefits associated with changes in levels of ocean escapement (costs and benefits of spawner escapement and inside harvest) are not included. No attempt is made to estimate the economic value of the treaty-Indian commercial catch, although these landings do generate personal income for the local and state economies. The procedures and methods used to analyze the economic impacts follow those documented in previous preseason reports and the annual reviews of ocean salmon fisheries.

The economic effects of the proposed options for non-Indian fisheries are shown in Tables 9 and 10. Table 9 shows troll impacts expressed in terms of estimates of potential exvessel value, and Table 10 shows recreational impacts in terms of trips generated and coastal community personal income expected to be associated with the recreational fishery under each option. The exvessel values provided for the troll fishery options in Table 9 and income impact values provided for the recreational fishery options in Table 10 are not directly comparable.

Figures 3 and 4 show estimated coastal community income impacts for both the troll and recreational options compared to historic impacts in real (inflation adjusted) dollars.

TABLE 1. Council-adopted **non-Indian commercial troll** management measures for ocean salmon fisheries, 2003.
(Page 1 of 4)

A. SEASON DESCRIPTION

North of Cape Falcon

Supplementary Management Information:

1. Overall non-Indian TAC: 124,000 chinook and 300,000 coho.
 2. No trade between recreational and commercial fisheries.
 3. Non-Indian Troll TAC: 64,400 chinook and 75,000 coho.
 4. Treaty Indian commercial ocean troll quotas of: 60,000 chinook (30,000 in May and June; 30,000 for the all-salmon season in July through September 15, with no rollover allowed from May-June season); and 90,000 coho.
-

U.S./Canada Border to Cape Falcon

- May 1 through earlier of June 30 or 40,000 chinook quota. The fishery will be managed to provide a remaining quota of 800 chinook for a June 26-30 open period with a 50 fish per vessel landing limit for the five-day open period. All salmon except coho (B; C.6). Cape Flattery and Columbia Control Zones closed (C.4). See gear restrictions (C.2). Vessels must land and deliver their fish within the area or in Garibaldi, Oregon, and within 24 hours of any closure of this fishery. State regulations require that fishers south of Cape Falcon intending to fish within this area, and/or fishers fishing within this area intending to land salmon in Garibaldi, Oregon, notify Oregon Department of Fish and Wildlife (ODFW) before transiting the Cape Falcon line (45° 46'00" N. lat.) at the following phone number: (541) 867-0300 Ex. 252. Inseason actions may modify harvest guidelines in later fisheries to achieve or prevent exceeding the overall allowable troll harvest impacts (C.7.a).

U.S./Canada Border to Cape Falcon

- July 3 through earlier of September 14 or 24,400 preseason chinook guideline (C.7.a), or a 75,000 coho quota. Fishery is 5-days open/2-days closed. Landing limit of 75 chinook per vessel for the period July 3-7; landing limit of 150 chinook per 5-day open period for the remainder of the season. All salmon except no chum retention north of Cape Alava during August and September (B; C.6). All retained coho must have a healed adipose fin clip (C.6). Cape Flattery, and Columbia Control Zones closed; Grays Harbor Control Zone closed beginning August 16 (C.4). See gear restrictions (C.2). Vessels must land and deliver their fish within the area or in Garibaldi, Oregon, and within 24 hours of any closure of this fishery. State regulations require fishers south of Cape Falcon intending to fish within this area, and/or fishers fishing within this area intending to land salmon in Garibaldi, Oregon, notify ODFW before transiting the Cape Falcon line (45° 46'00" N. lat.) at the following phone number: (541) 867-0300 Ex. 252. Trip limits, gear restrictions, and guidelines may be implemented or adjusted inseason.
-

South of Cape Falcon

Cape Falcon to Florence South Jetty

- March 15 through July 16; August 1 through August 19 and September 1 through October 31 (C.8). All salmon except coho (C.6). Chinook 26 inch minimum size limit, except 27 inches May 1 through September 30 and 28 inches October 1 through October 31 (B). See gear restrictions (C.2) and Oregon state regulations for a description of the closed area at the mouth of Tillamook Bay.

In 2004, the season will open March 15 for all salmon except coho. Chinook 26-inch minimum size limit. This opening could be modified following Council review at its November 2003 meeting.

Florence South Jetty to Humbug Mt.

- March 15 through June 30; July 17 through July 31; August 11 through August 29; and September 1 through October 31 (C.8). All salmon except coho (C.6). Chinook 26 inch minimum size limit, except 27 inches May 1 through September 30 and 28 inches October 1 through October 31 (B). See gear restrictions (C.2).

In 2004, the season will open March 15 for all salmon except coho. Chinook 26-inch minimum size limit. This opening could be modified following Council review at its November 2003 meeting.

TABLE 1. Council-adopted **non-Indian commercial troll** management measures for ocean salmon fisheries, 2003.
(Page 2 of 4)

A. SEASON DESCRIPTION (Continued)

Humbug Mt. to OR-CA Border

- March 15 through May 31. All salmon except coho. See gear restrictions (C.2).
- June 1 through earlier of June 30 or 2,500 chinook quota;
- July 1 through earlier of July 31 or 1,200 chinook quota;
- August 1 through earlier of August 29 or 2,500 chinook quota;
- September 1 through earlier of September 30 or 3,000 chinook quota with a chinook 28 inch minimum size limit (B). No transfer of remaining quota from earlier fisheries allowed (C.8). All salmon except coho. Possession and landing limit of 50 fish per trip June 1 through August 29; 65 fish per trip September 1-30. See gear restrictions (C.2). June 1 through September 30 all salmon must landed and delivered to Gold Beach, Port Orford, or Brookings, and within 24 hours of closure.

In 2004, the season will open March 15 for all salmon except coho. Chinook 26-inch minimum size limit. This opening could be modified following Council review at its November 2003 meeting.

OR-CA Border to Humboldt South Jetty

- September 1 through earlier of September 30 or 10,000 chinook quota. All salmon except coho (B). Possession and landing limit of 40 fish per day. All fish caught in this area must be landed within the area and within 24 hours of any closure. See gear restrictions (C.2). Klamath Control Zone closed (C.4.d). When the fishery is closed between the OR-CA border and Humbug Mt. and open to the south, vessels with fish on board caught in the open area off California may seek temporary mooring in Brookings, Oregon, prior to landing in California only if such vessels first notify the Chetco River Coast Guard Station via VHF channel 22A between the hours of 0500 and 2200 and provide the vessel name, number of fish on board, and estimated time of arrival.

Horse Mt. to Pt. Arena (Fort Bragg)

- May 1 through May 31, July 3 -14; July 18 through September 30. All salmon except coho (B). No possession or landing limit, or area landing restriction except: July 3 - 14 possession and landing limit of 150 fish per day per vessel and all fish caught in this area must be landed within the area and within 24 hours of any closure. See gear restrictions (C.2).

Pt. Arena to U.S-Mexico Border

- May 1 through September 30. All salmon except coho (B). See gear restrictions (C.2).

Pt. Reyes to Pt. San Pedro (Fall Area Target Zone)

October 1 through October 17, Monday through Friday. All salmon except coho (B). See gear restrictions (C.2).

B. MINIMUM SIZE (Inches) (See C.1)

Area (when open)	Chinook		Coho		Pink
	Total Length	Head-off	Total Length	Head-off	
North of Cape Falcon	28.0	21.5	16.0	12.0	None
Cape Falcon to Humbug Mt.					
Prior to May 1	26.0	19.5	-	-	None
May 1- September 30	27.0	20.5	-	-	None
October 1-31	28.0	21.5	-	-	None
Humbug Mt. to OR/CA Border					
Prior to September 1	26.0	19.5	-	-	None
September 1-30	28.0	21.5	-	-	None
South of OR/CA Border	26.0	19.5	-	-	None

TABLE 1. Council-adopted **non-Indian commercial troll** management measures for ocean salmon fisheries, 2003.
(Page 3 of 4)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

- C.1. Compliance with Minimum Size or Other Special Restrictions: All salmon on board a vessel must meet the minimum size or other special requirements for the area being fished and the area in which they are landed if that area is open. Salmon may be landed in an area that is closed only if they meet the minimum size or other special requirements for the area in which they were caught.
- C.2. Gear Restrictions:
- a. Single point, single shank barbless hooks are required in all fisheries.
 - b. *Cape Falcon, Oregon to the Oregon/California border:* No more than 4 spreads are allowed per line.

Spread defined: A single leader connected to an individual lure or bait.
 - c. *Oregon/California border to U.S./Mexico border:* No more than 6 lines are allowed per vessel and barbless circle hooks are required when fishing with bait by any means other than trolling.

Circle hook defined: A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle.

Trolling defined: Fishing from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.
- C.3. Transit Through Closed Areas with Salmon on Board: It is unlawful for a vessel to have troll or recreational gear in the water while transiting any area closed to fishing for a certain species of salmon, while possessing that species of salmon; however, fishing for species other than salmon is not prohibited if the area is open for such species and no salmon are in possession.
- C.4. Control Zone Definitions:
- a. *Cape Flattery Control Zone* - The area from Cape Flattery (48°23'00" N. lat.) to the northern boundary of the U.S. EEZ; and the area from Cape Flattery south to Cape Alava (48°10'00" N. lat.), and east of 125° 05'00" W. long.
 - b. *Grays Harbor Control Zone* - The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124°12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 36'00" N. lat., 124°10'51" W. long.).
 - c. *Columbia Control Zone* - An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46°13'35" N. Lat., 124°06'50" W. long.) and the green lighted Buoy #7 (46°15'09" N. lat., 124°06'16" W. long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46°14'00" N. lat., 124°03'07" W. long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46°15'48" N. lat., 124°05'20" W. long.) and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46°14'03" N. lat., 124°04'05" W. long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
 - d. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west, by 124°23'00" W. long. (approximately 12 nautical miles off shore); and, on the south, by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).
- C.5. Notification When Unsafe Conditions Prevent Compliance with Regulations: If prevented by unsafe weather conditions or mechanical problems from meeting special management area landing restrictions, vessels must notify the U.S. Coast Guard and receive acknowledgment of such notification prior to leaving the area. This notification shall include the name of the vessel, port where delivery will be made, approximate amount of salmon (by species) on board and the estimated time of arrival.

TABLE 1. Council-adopted **non-Indian commercial troll** management measures for ocean salmon fisheries, 2003.
(Page 4 of 4)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (Continued)

- C.6. Incidental Halibut Harvest: During authorized periods, the operator of a vessel that has been issued an incidental halibut harvest license may retain Pacific halibut caught incidentally in Area 2A while trolling for salmon. Halibut retained must be no less than 32 inches in measured from the tip of the lower jaw with the mouth closed to the extreme end of the middle of the tail, and must be landed with the head on. License applications for incidental harvest must be obtained from the International Pacific Halibut Commission (phone 206-634-1838). Applicants must apply prior to April 1 of each year. Incidental harvest is authorized only during May-June troll seasons and after June 30 if quota remains and if announced on the NMFS hotline (phone 800-662-9825). ODFW and WDFW will monitor landings. If the landings are projected to exceed the 39,300 pound preseason allocation or the total Area 2A non-Indian commercial halibut allocation, NMFS will take inseason action to close the incidental halibut fishery.

License holders may land no more than 1 halibut per each 3 chinook, except 1 halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Halibut retained must be no less than 32 inches in total length (with head on).

A "C-shaped" yelloweye rockfish conservation area is an area to be avoided for salmon troll fishing. The area is defined in the Pacific Council Halibut Catch Sharing Plan in the North Coast subarea (WA marine area 3), with the following coordinates in the order listed:

48°18' N. lat.; 125°18' W. long;
 48°18' N. lat.; 124°59' W. long;
 48°11' N. lat.; 124°59' W. long;
 48°11' N. lat.; 125°11' W. long;
 48°04' N. lat.; 125°11' W. long;
 48°04' N. lat.; 124°59' W. long;
 48°00' N. lat.; 124°59' W. long;
 48°00' N. lat.; 125°18' W. long;
 And connecting back to 48°18' N. lat.; 125°18' W. long.

- C.7. Inseason Management: In addition to standard inseason actions or modifications already noted under the season description, the following inseason guidance is provided to NMFS:
- a. Any chinook remaining in the May-June non-Indian commercial troll harvest guideline north of Cape Falcon may be transferred to the July-September harvest guideline on a fishery impact equivalent basis.
 - b. At the March 2004 meeting, the Council will consider inseason recommendations to: (1) open commercial seasons for all salmon except coho prior to May 1 in the area between Horse Mt. and Point Arena, California, and (2) identify the areas, season, quota, and special regulations for any experimental April fisheries (experimental fishery proposals must meet Council protocol and be received in November 2003).
- C.8. Consistent with Council management objectives, the State of Oregon may establish additional late-season, chinook-only fisheries in state waters. Check state regulations for details.
- C.9. For the purposes of CDFG Code, Section 8232.5, the definition of the KMZ for the ocean salmon season shall be that area from Humbug Mt., Oregon to Horse Mt., California.
-

FIGURE 1. Council-adopted non-Indian commercial troll salmon seasons, 2003. Dates are first or last days of the month unless otherwise specified.

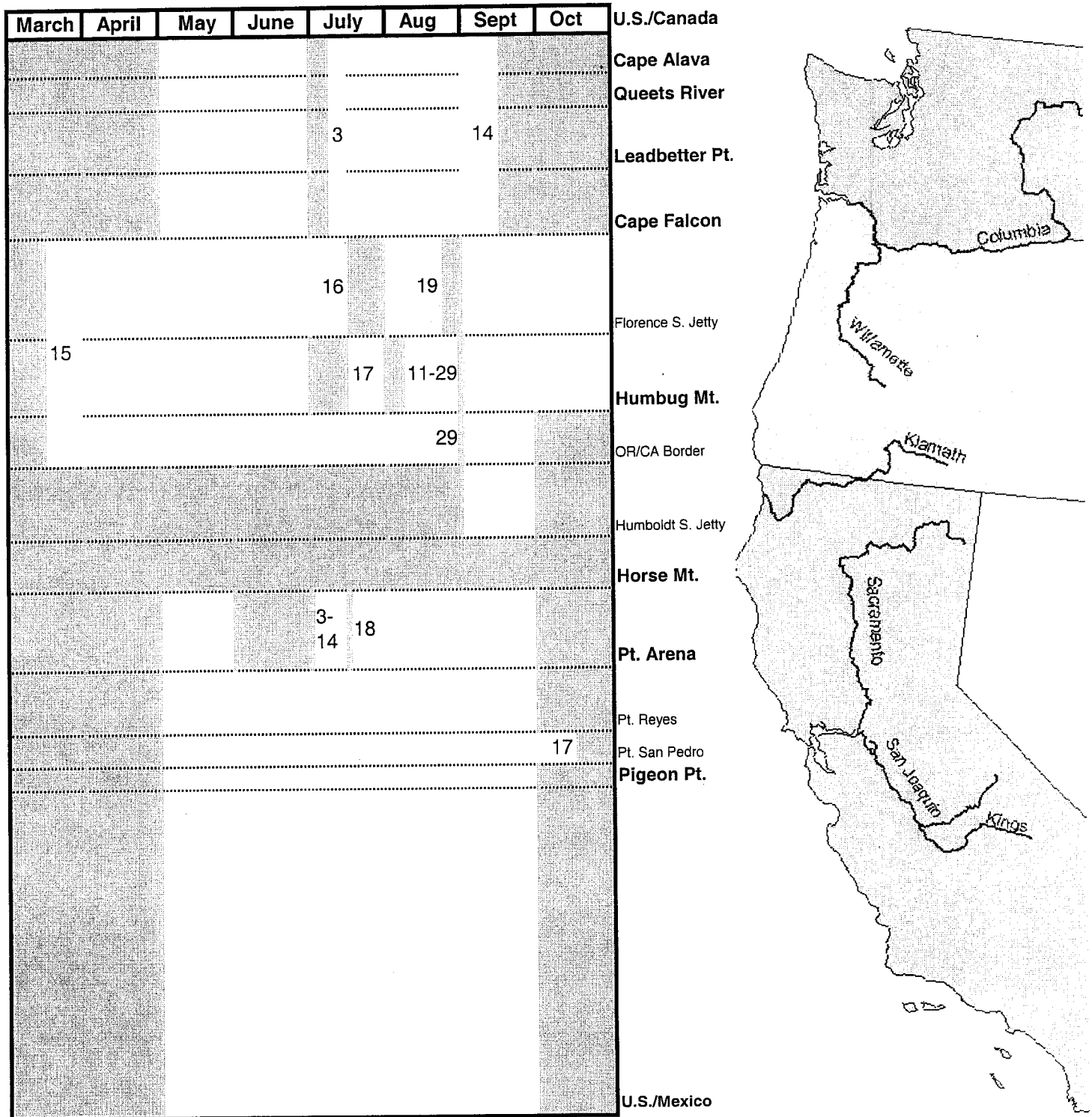


TABLE 2. Council-adopted **Recreational** management measures for ocean salmon fisheries, 2003. (Page 1 of 4)

A. SEASON DESCRIPTION

North of Cape Falcon

Supplementary Management Information:

1. Overall non-Indian TAC: 124,000 chinook and 300,000 coho.
2. No trade between recreational and commercial fisheries.
3. Recreational TAC: 59,600 chinook and 225,000 coho.
4. No Area 4B add-on fishery.
5. Buoy 10 fishery opens August 1 with an expected landed catch of 35,000 coho with healed adipose fin clips.

U.S.-Canada Border to Cape Alava (Neah Bay Area)

- June 22 through earlier of September 14 or 23,400 coho subarea quota with a subarea guideline of 3,900 chinook.

All salmon except no chum retention north of Cape Alava August 1 through September 14; open 7 days per week, 2 fish per day plus one additional pink salmon, only one of which may be a chinook (chinook 26-inch minimum size limit) (B). All retained coho must have a healed adipose fin clip. See gear restrictions (C.2). Chinook non-retention east of the Bonilla-Tatoosh line (C.3.d) during Council managed ocean fishery, except chinook retention allowed July 1 through July 31. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon (C.4).

Cape Alava to Queets River (La Push Area)

- June 22 through earlier of September 14 or 5,750 coho subarea quota with a subarea guideline of 2,300 chinook;
- September 20 through earlier of October 5 or 100 coho quota or 100 chinook quota: Inside area defined by a line from Teahwhit Head (47°52'24" N. lat., 124°36'36" W. long.) northwesterly to "Q" buoy (47°53'08" N. lat., 124°40'34" W. long.) to Cake Rock (47°56'00" N. lat., 124°41'12" W. long.) then true east to the shoreline (C.5).

All salmon, open 7 days per week, 2 fish per day plus one additional pink salmon, only one of which may be a chinook (chinook 26-inch minimum size limit) (B). All retained coho must have a healed adipose fin clip. See gear restrictions (C.2). Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon (C.4).

Queets River to Leadbetter Pt. (Westport Area)

- June 22 through earlier of September 14 or 83,250 coho subarea quota with a subarea guideline of 40,600 chinook.

Open Sunday through Thursday All salmon, 2 fish per day, only one of which may be a chinook (chinook 26-inch minimum size limit) (B). All retained coho must have a healed adipose fin clip. See gear restrictions (C.2). Grays Harbor Control Zone closed beginning August 16 (C.3.b). Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon (C.4).

Leadbetter Pt. to Cape Falcon (Columbia River Area)

- June 29 through earlier of September 30 or 112,500 coho subarea quota with a subarea guideline of 12,700 chinook.

Open Sunday through Thursday A conference call will be scheduled for a day no later than August 6 to discuss opening 7 days per week. All salmon. Two fish per day, only one of which may be a chinook (chinook 26-inch minimum size limit) (B). All retained coho must have a healed adipose fin clip. See gear restrictions (C.2). Columbia Control Zone closed (C.3.a). Closed between Cape Falcon and Tillamook Head beginning August 1. Inseason management may be used to sustain season length and keep harvest within the overall chinook recreational TAC for north of Cape Falcon (C.4).

A. SEASON DESCRIPTION (Continued)

South of Cape Falcon

Cape Falcon to Humbug Mt.

- Except as provided below during the mark selective fishery, the season will be: March 15 through October 31 (C.5).

All salmon except coho (B). Open 7 days per week, 2 fish per day. See gear restrictions (C.2.). See Oregon State regulations for a description of a closure at the mouth of Tillamook Bay (C.5).

In 2004, the season will open March 15 for all salmon except coho. Open 7 days per week, 2 fish per day, and the same gear restrictions as in 2003 (C.2). This opening could be modified following Council review at its November 2003 meeting.

Selective fishery for marked coho:

- June 21 through earlier of August 24 or a landed catch of 88,000 coho.
Open 7 days per week. All salmon (B). 2 fish per day. All retained coho must have a healed adipose fin clip. Open days may be adjusted inseason to utilize the available quota (C.4). All salmon except coho season reopens the earlier of August 25 or attainment of the coho quota.

Humbug Mt. to Horse Mt. (Klamath Management Zone)

- May 17 through September 14.

All salmon except coho (B). Open 7 days per week, 2 fish per day. See gear restrictions (C.2). Klamath Control Zone closed (C.3.c).

Horse Mt. to Pt. Arena (Fort Bragg)

- February 15 through November 16.

All salmon except coho. Open 7 days per week, 2 fish per day. Chinook minimum size limit 24 inches through April 30, and 20 inches thereafter (B). See gear restrictions (C.2).

In 2004, season opens February 14 (nearest Saturday to February 15) for all salmon except coho. Open 7 days per week, 2 fish per day, chinook 24-inch minimum size limit (B) and the same gear restrictions as in 2003 (C.2).

Pt. Arena to Pigeon Pt. (San Francisco)

- April 12 through November 9.

All salmon except coho. Open 7 days per week, 2 fish per day. Chinook minimum size limit 24 inches through April 30, and 20 inches thereafter (B). See gear restrictions (C.2).

In 2004, the season will open April 17 for all salmon except coho. Open 7 days per week, 2 fish per day, chinook 24-inch minimum size limit (B) and the same gear restrictions as in 2003 (C.2).

Pigeon Pt. to U.S.-Mexico Border

- March 29 through September 28.

All salmon except coho. Open 7 days per week, 2 fish per day. Chinook minimum size limit 24 inches through April 30, and 20 inches thereafter (B). See gear restrictions (C.2).

In 2004, the season will open April 3 for all salmon except coho. Open 7 days per week, 2 fish per day, chinook 24-inch minimum size limit (B) and the same gear restrictions as in 2003 (C.2).

TABLE 2. Council-adopted **Recreational** management measures for ocean salmon fisheries, 2003. (Page 3 of 4)

B. MINIMUM SIZE (Total Length in Inches) (See C.1)

Area (when open)	Chinook	Coho	Pink
North of Cape Falcon	26.0	16.0	None
Cape Falcon to Horse Mt.	20.0	16.0	None, except 20.0 off CA
South of Horse Mt. Prior to May 1	24.0	-	20.0
Beginning May 1	20.0	-	20.0

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS

C.1. Compliance with Minimum Size and Other Special Restrictions: All salmon on board a vessel must meet the minimum size or other special requirements for the area being fished, and the area in which they are landed if that area is open. Salmon may be landed in an area that is closed only if they meet the minimum size or other special requirements for the area in which they were caught.

C.2. Gear Restrictions: All persons fishing for salmon, and all persons fishing from a boat or floating device with salmon on board must meet the gear restrictions listed below for specific areas or seasons.

- a. *U.S./Canada Border to Pt. Conception, California:* No more than one rod may be used per angler and single point, single shank barbless hooks are required for all fishing gear. [Note: ODFW regulations in the state-waters fishery off Tillamook Bay may allow the use of barbed hooks to be consistent with inside regulations.]
- b. *Cape Falcon, Oregon to Pt. Conception, California:* Anglers must use no more than 2 single point, single shank barbless hooks.
- c. *Horse Mt., California to Pt. Conception, California:* Single point, single shank, barbless circle hooks (below) must be used if angling with bait by any means other than trolling and no more than 2 such hooks shall be used. When angling with 2 hooks, the distance between the hooks must not exceed 5 inches when measured from the top of the eye of the top hook to the inner base of the curve of the lower hook, and both hooks must be permanently tied in place (hard tied). Circle hooks are not required when artificial lures are used without bait.

Circle hook defined: A hook with a generally circular shape and a point which turns inward, pointing directly to the shank at a 90° angle.

Trolling defined: Angling from a boat or floating device that is making way by means of a source of power, other than drifting by means of the prevailing water current or weather conditions.

C.3. Control Zone Definitions:

- a. *Columbia Control Zone* - An area at the Columbia River mouth, bounded on the west by a line running northeast/southwest between the red lighted Buoy #4 (46°13'35" N. Lat., 124°06'50" W. long.) and the green lighted Buoy #7 (46°15'09" N. lat., 124°06'16" W. long.); on the east, by the Buoy #10 line which bears north/south at 357° true from the south jetty at 46°14'00" N. lat., 124°03'07" West. long. to its intersection with the north jetty; on the north, by a line running northeast/southwest between the green lighted Buoy #7 to the tip of the north jetty (46°15'48" N. lat., 124°05'20" W. long.) and then along the north jetty to the point of intersection with the Buoy #10 line; and, on the south, by a line running northeast/southwest between the red lighted Buoy #4 and tip of the south jetty (46°14'03" N. lat., 124°04'05" W. long.), and then along the south jetty to the point of intersection with the Buoy #10 line.
- b. *Grays Harbor Control Zone* - The area defined by a line drawn from the Westport Lighthouse (46° 53'18" N. lat., 124° 07'01" W. long.) to Buoy #2 (46° 52'42" N. lat., 124° 12'42" W. long.) to Buoy #3 (46° 55'00" N. lat., 124°14'48" W. long.) to the Grays Harbor north jetty (46° 36'00" N. lat., 124° 10'51" W. long.).

TABLE 2. Council-adopted **Recreational** management measures for ocean salmon fisheries, 2003. (Page 4 of 4)

C. REQUIREMENTS, DEFINITIONS, RESTRICTIONS, OR EXCEPTIONS (Continued)

- c. *Klamath Control Zone* - The ocean area at the Klamath River mouth bounded on the north by 41°38'48" N. lat. (approximately 6 nautical miles north of the Klamath River mouth); on the west, by 124°23'00" W. long. (approximately 12 nautical miles off shore); and, on the south, by 41°26'48" N. lat. (approximately 6 nautical miles south of the Klamath River mouth).
 - d. *The Bonilla-Tatoosh Line* is defined as: A line running from the western end of Cape Flattery to Tatoosh Island Lighthouse (48°23'30" N. lat., 124°44'12" W. long.) to the buoy adjacent to Duntze Rock (48°28'00" N. lat., 124°45'00" W. long.), then in a straight line to Bonilla Point (48°35'30" N. lat., 124°43'00" W. long.) on Vancouver Island, B.C.
- C.4. Inseason Management: Regulatory modifications may become necessary inseason to meet preseason management objectives such as quotas, harvest guidelines, and season duration. Actions could include modifications to bag limits or days open to fishing, and extensions or reductions in areas open to fishing. NMFS may transfer coho inseason among recreational subareas north of Cape Falcon to help meet the recreational season duration objectives (for each subarea) after conferring with the states, Council, representatives of the affected ports, and the Salmon Advisory Subpanel recreational representatives north of Cape Falcon.
- C.5. Additional Seasons in State Territorial Waters: Consistent with Council management objectives, the states of Washington and Oregon may establish limited seasons in state waters. Oregon state-water fisheries are limited to chinook salmon. Check state regulations for details.
-

FIGURE 2. Council-adopted recreational salmon seasons, 2003. Dates are first or last days of the month unless otherwise specified.

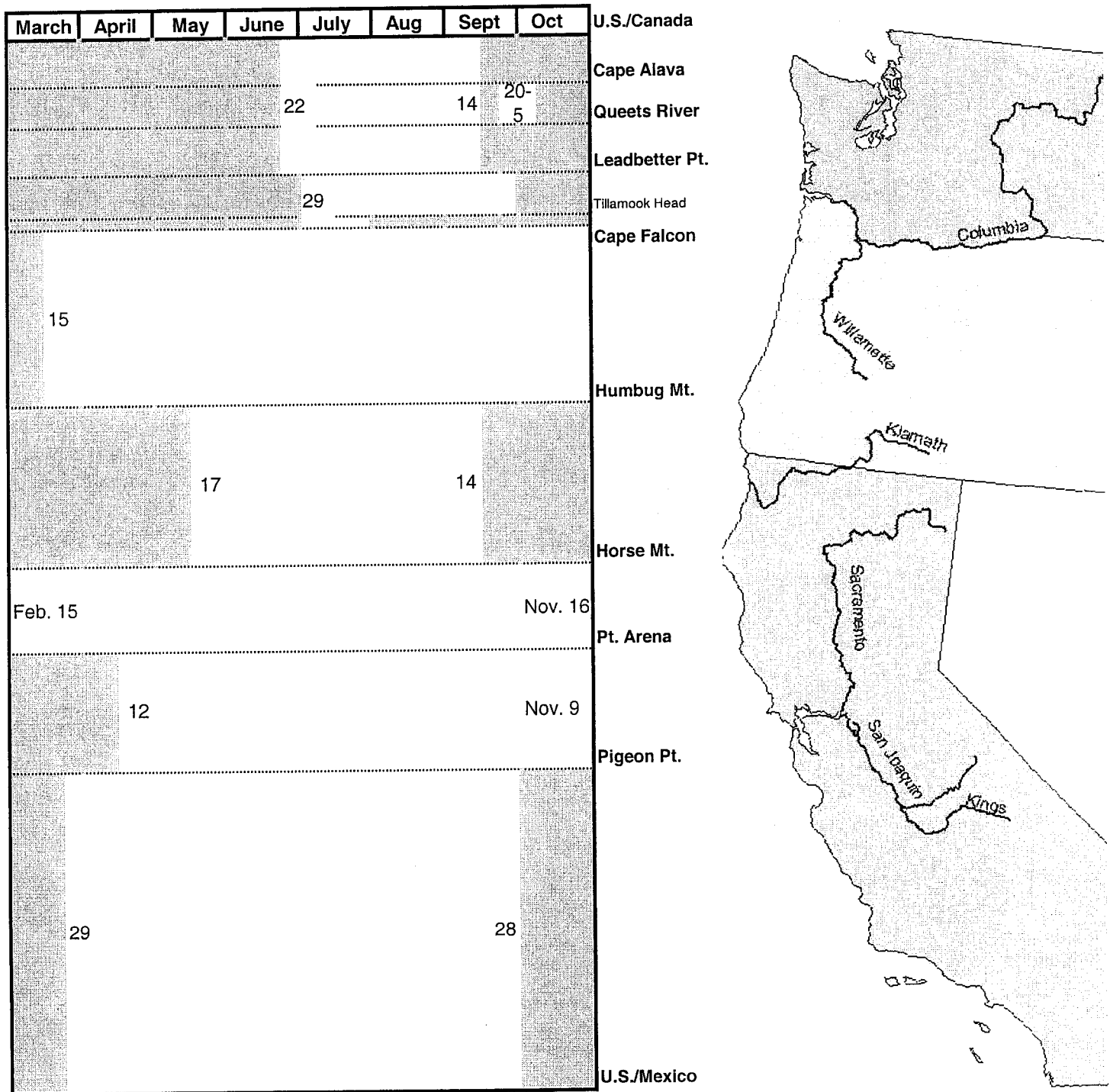


TABLE 3. Council-adopted **treaty Indian ocean troll** salmon fishery management measures, 2003. (Page 1 of 1)

Tribe and Area Boundaries ^{a/}	Open Seasons	Salmon Species	Minimum Size ^{b/} (Inches)		Special Restrictions by Area
			Chinook	Coho	
S'KLALLAM - Washington State Statistical Area 4B (All)	May 1 thru earlier of June 30 or chinook quota. ^{c/}	All except coho	24	-	Barbless hooks. No more than 8 fixed lines per boat; 72 hook maximum per boat.
	July 1 thru earliest of September 15 or chinook or coho quota.	All	24	16	
MAKAH - Washington State Statistical Area 4B and that portion of the FMA north of 48°02'15" N. lat. (Norwegian Memorial) and east of 125°44'00" W. long.	May 1 thru earlier of June 30 or chinook quota. ^{c/}	All except coho	24	-	Barbless hooks. No more than 8 fixed lines per boat or no more than 4 hand-held lines per person.
	July 1 thru earliest of September 15 or chinook or coho quota	All	24	16	
QUILEUTE - That portion of the FMA between 48°07'36" N. lat. (Sand Pt.) and 47°31'42" N. lat. (Queets River) and east of 125°44'00" W. long.	May 1 thru earlier of June 30 or chinook quota. ^{c/}	All except coho	24	-	Barbless hooks. No more than 8 fixed lines per boat. ^{e/}
	July 1 thru earliest of September 15 or chinook or coho quota. ^{c/d/}	All	24	16	
HOH - That portion of the FMA between 47°54'18" N. lat. (Quillayute River) and 47°21'00" N. lat. (Quinault River) and east of 125°44'00" W. long.	May 1 thru earlier of June 30 or chinook quota. ^{c/}	All except coho	24	-	Barbless hooks. No more than 8 fixed lines per boat. ^{d/}
	July 1 thru earliest of September 15 or chinook or coho quota ^{c/}	All	24	16	
QUINAULT - That portion of the FMA between 47°40'06" N. lat. (Destruction Island) and 46°53'18" N. lat. (Point Chehalis) and east of 125°44'00" W. long.	May 1 thru earlier of June 30 or chinook quota. ^{c/}	All except coho	24	-	Barbless hooks. No more than 8 fixed lines per boat. ^{d/}
	July 1 thru earliest of September 15 or chinook or coho quota ^{c/}	All	24	16	

a/ All boundaries may be changed to include such other areas as may hereafter be authorized by a Federal court for that tribe's treaty fishery.

b/ Applicable lengths, in inches, for dressed, head-off salmon, are 18 inches for chinook and 12 inches for coho. There are no minimum size or retention limits for ceremonial and subsistence harvest.

c/ The overall treaty troll ocean quotas are: 60,000 chinook and 90,000 coho. The overall chinook quota is divided into 30,000 chinook for the May/June chinook-directed fishery and 30,000 chinook for the July through September all-salmon season. If the chinook quota for the May/June fishery is not fully utilized, the excess fish cannot be transferred into the later all-salmon season. The quotas include troll catches by the S'Klallam and Makah tribes in Washington State Statistical Area 4B from May 1 through September 15.

d/ The Quileute Tribe will continue a ceremonial and subsistence fishery during the time frame of September 15 through October 15 in the same manner as in 2002; fish taken during this fishery are to be counted against treaty Indian ocean troll quotas established for the July through September 2003 season (see c/ above).

e/ The area within a 6 nautical mile radius of the mouths of the Queets River (47°31'42" N. lat.) and the Hoh River (47°45'12" N. lat.) will be closed to commercial fishing. A closure within 2 nautical miles of the mouth of the Quinault River (47°21'00" N. lat.) may be enacted by the Quinault Nation and/or the State of Washington and will not adversely affect the Secretary of Commerce's management regime.

TABLE 4. Chinook and coho harvest quotas and guidelines (*) (thousands of fish) for Council-adopted ocean salmon fisheries, 2003. (Page 1 of 1)

Fishery or Quota Designation	Chinook	Coho
NORTH OF CAPE FALCON		
TREATY INDIAN COMMERCIAL TROLL ^{a/}	60.0	90.0
NON-INDIAN COMMERCIAL TROLL		
Canada to Cape Falcon (May-June)	40.0	-
Canada to Cape Falcon (July-Sept.)	24.4	75.0 ^{b/}
Subtotal Non-Indian Commercial Troll	64.4	75.0
RECREATIONAL (selective coho fisheries)		
U.S.-Canada Border to Cape Alava	3.9*	23.4 ^{b/}
Cape Alava to Queets River	2.4*	5.9 ^{b/}
Queets River to Leadbetter Pt.	40.6*	83.3 ^{b/}
Leadbetter Pt. to Cape Falcon	12.7*	112.5 ^{b/}
Subtotal Recreational	59.6	225.0
TOTAL NORTH OF CAPE FALCON	184.0	390.0
SOUTH OF CAPE FALCON		
COMMERCIAL TROLL (all except coho)		
Humbog Mt. to OR-CA border (June-Sept.)	9.2	-
Oregon-California Border to Humboldt S. Jetty (Sept.)	10.0	-
Subtotal Troll	19.2	-
RECREATIONAL		
Cape Falcon to Humbog Mt.	-	88.0 ^{b/}
TOTAL SOUTH OF CAPE FALCON	19.2	88.0

a/ For the Makah encounter rate study, legal sized fish retained in open periods will be included in the treaty Indian commercial troll quota.

b/ All retained coho must have a healed adipose fin clip.

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for Council-adopted ocean salmon fisheries, 2003.^{a/} (Page 1 of 2)

Key Stock/Criteria	Projected Ocean Escapement ^{a/} or Other Criteria (Council Area Fisheries)	Spawner Objective or Other Comparative Standard as Noted	
		CHINOOK	
Columbia Upriver Brights	253.2	57.3	Minimum ocean escapement to attain 43.5 adults over McNary Dam, with normal distribution and no mainstem harvest.
Mid-Columbia Brights	93.6	16.6	Minimum ocean escapement to attain 5.75 adults for Bonneville Hatchery and 2.0 for Little White Salmon Hatchery egg-take, assuming average conversion and no mainstem harvest.
Columbia Lower River Hatchery Tules	116.9	23.4	Minimum ocean escapement to attain 14.3 adults for hatchery egg-take, with average conversion and no lower river mainstem or tributary harvest.
Columbia Lower River Natural Tules	47%	≤49%	ESA guidance met by a total adult equivalent fishery exploitation rate on Coweeman tules (NMFS ESA consultation standard).
Columbia Lower River Wild ^{a/} (threatened)	23.4	5.7	MSY spawner goal for North Lewis River fall chinook (NMFS ESA consultation standard).
Spring Creek Hatchery Tules	101.9	11.1	Minimum ocean escapement to attain 7.0 adults for Spring Creek Hatchery egg-take, assuming average conversion and no mainstem harvest.
Snake River Fall (threatened) SRFI	67%	≤70.0%	Of 1988-1993 average age 3 and 4 AEQ exploitation rate for all ocean fisheries (NMFS ESA consultation standard).
Klamath River Fall	35.0	≥35.0	Adult spawners to natural spawning areas.
Age 4 ocean harvest rate	16.0%	≤16.0%	NMFS ESA consultation standard for threatened California Coastal chinook.
Federally recognized tribal fisheries	50.0%	50.0%	Share of adult harvest. Equates to 41.4 adult fish for the Yurok and Hoopa tribal fisheries.
KMZ recreational fishery	14.8%	-	Share of ocean adult harvest (none specified for 2003).
CA/OR commercial fishery	51%/49%	-	Share of ocean commercial adult harvest for the States of California/Oregon (non specified for 2003).
Klamath River recreational fishery	26.1%	≥15.0%	Share of nontribal adult harvest, specified by California Fish and Game Commission. Equates to 10.8 adult fish.
Sacramento River Winter (endangered)	Yes		Duration and timing of commercial and recreational seasons south of Point Arena not to differ substantially relative to those of 2000 and 2001 (NMFS ESA consultation standard).
Sacramento River Fall	517.0	122.0-180.0	Sacramento River fall natural and hatchery adult spawners.

TABLE 5. Projected key stock escapements (thousands of fish) or management criteria for Council-adopted ocean salmon fisheries, 2003.^{a/} (Page 2 of 2)

Key Stock/Criteria	Projected Ocean Escapement ^{b/} or Other Criteria (Council Area Fisheries)	Spawner Objective or Other Comparative Standard as Noted
COHO		
Interior Fraser (Thompson River)	8.3%	≤10% Total exploitation rate for all US fisheries south of the US/Canada border.
PUGET SOUND:		
Skagit	37% (5.4%) 97.9	≤60% 2003 total exploitation rate ceiling based on comanager comprehensive coho management plan ^{d/} 30.0 MSP level of adult spawners Identified in FMP.
Stillaguamish	37% (7.8%) 27.7	≤50% 2003 total exploitation rate ceiling based on comanager comprehensive coho management plan ^{d/} 17.0 MSP level of adult spawners Identified in FMP.
Snohomish	33% (7.8%) 147.6	≤60% 2003 total exploitation rate ceiling based on comanager comprehensive coho management plan ^{d/} 70.0 MSP level of adult spawners Identified in FMP.
Hood Canal	41% (5.9%) 25.8	≤45% 2003 total exploitation rate ceiling based on comanager comprehensive coho management plan ^{d/} 21.5 MSP level of adult spawners Identified in FMP.
Strait of Juan de Fuca	14% (5.8%) 18.0	≤40% 2003 total exploitation rate ceiling based on comanager comprehensive coho management plan ^{d/} 12.8 MSP level of adult spawners Identified in FMP.
COASTAL NATURAL:		
Quillayute Fall	21.2	6.3-15.8 MSY adult spawner range (not annual target). Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Hoh	10.4	2.0-5.0 MSY adult spawner range (not annual target). Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Queets Wild	19.6	5.8-14.5 MSY adult spawner range (not annual target). Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Queets Supplemental	1.1	-
Grays Harbor	52.3	35.4 MSP level of adult spawners. Annual management objectives may be different and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders.
Oregon Coastal Natural (threatened)	14.4%	≤15.0% Marine and freshwater fishery exploitation rate.
Northern California (threatened)	9.6%	≤13.0% Marine fishery exploitation rate for R/K hatchery coho (NMFS ESA consultation standard).
COLUMBIA RIVER:		
Upper Columbia	52%	50% Minimum percentage of the run to Bonneville Dam.
Columbia River Hatchery Early	246.4	38.7 Minimum ocean escapement to attain hatchery egg-take goal of 19.6 early adult coho, with average conversion and no mainstem or tributary fisheries.
Columbia River Hatchery Late	145.9	19.4 Minimum ocean escapement to attain hatchery egg-take goal of 15.2 late adult coho, with average conversion and no mainstem or tributary fisheries.

a/ Projections in the table assume a Southeast Alaska TAC of 366,700 chinook per PST agreement. For Canadian chinook fisheries assumed TACs were 112,500 for WCVI Troll and outside sport, and a TAC of 1,400 in the Georgia Strait troll fishery. All other Canadian troll and sport fisheries were assumed to have the same impact rates as in 2002.

b/ Ocean escapement is the number of salmon escaping ocean fisheries and entering freshwater with the following clarifications. Ocean escapement for Puget Sound stocks is the estimated number of salmon entering Area 4B that are available to U.S. net fisheries in Puget Sound and spawner escapement after impacts from the Canadian, U.S. ocean, and Puget Sound troll and recreational fisheries have been deducted. Numbers in parentheses represent Council area exploitation rates for Puget sound coho stocks. For Columbia River early and late coho stocks, ocean escapement represents the number of coho after the Buoy 10 fishery. Exploitation rates for OCN coho include impacts of freshwater fisheries.

c/ Includes minor contributions from East Fork Lewis River and Sandy River.

d/ Annual management objectives may be different than FMP goals, and are subject to agreement between WDFW and the treaty tribes under U.S. District Court orders. Total exploitation rate includes all fisheries, and is calculated as total fishing mortality divided by total spawning escapement.

TABLE 6. Projected chinook and coho **harvest impacts** for Council-adopted ocean salmon fisheries, 2003. (Page 1 of 1)

Area and Fishery	2003 Catch Projection	2003 Bycatch Mortality ^{a/} Projection	Observed in 2002	
			Catch	Bycatch Mortality
OCEAN FISHERIES: ^{b/} CHINOOK (thousands of fish)				
NORTH OF CAPE FALCON				
Treaty Commercial Troll	60.0	8.9	39.1	4.3
Non-Indian Commercial Troll	64.4	24.5	81.6	20.7
Recreational	59.6	10.6	60.6	15.2
CAPE FALCON TO HUMBUG MT.				
Commercial Troll	120.7	14.7	284.5	31.2
Recreational	27.6	2.8	34.3	3.8
HUMBUG MT. TO HORSE MT.				
Commercial Troll	21.1	2.1	20.0	2.0
Recreational	38.1	3.8	26.0	2.6
SOUTH OF HORSE MT.				
Commercial	460.1	46.0	373.4	37.3
Recreational	153.2	15.3	163.3	16.3
TOTAL OCEAN FISHERIES				
Commercial Troll	726.3	96.2	798.6	95.5
Recreational	278.5	32.5	284.2	37.9
INSIDE FISHERIES:				
Buoy 10	21.2	NA	19.4	N/A
OCEAN FISHERIES: COHO (thousands of fish)				
NORTH OF CAPE FALCON				
Treaty Commercial Troll	90.0	5.3	17.5	1.5
Non-Indian Commercial Troll ^{c/}	75.0	26.6	1.7	20.6
Recreational ^{c/}	225.0	31.4	88.5	18.7
SOUTH OF CAPE FALCON				
Commercial Troll	0.0	16.7	-	8.9
Recreational ^{c/}	88.0	22.7	22.3	9.5
TOTAL OCEAN FISHERIES				
Commercial Troll	165.0	48.6	19.2	31.0
Recreational	313.0	54.1	110.8	28.2
INSIDE FISHERIES:				
Area 4B	-	-	-	-
Buoy 10 ^{c/}	35.0	4.0	6.2	0.8

a/ The bycatch mortality reported in this table consists of drop-off mortality (includes predation on hooked fish) plus hook-and-release mortality of chinook and coho salmon in Council-area fisheries. Drop-off mortality for both chinook and coho is assumed to be equal to 5% of total encounters. The hook-and-release mortality (HRM) rates used for both chinook and coho are:

Commercial: 26%.

Recreational, north of Pt. Arena: 14%.

Recreational, south of Pt. Arena: 23% (based on the expected proportion of fish that will be caught using mooching versus trolling gear, and the HRMs of 42.2% and 14% for these two respective gear types).

b/ Includes Oregon territorial water, late season chinook fisheries.

c/ Coho retention limited to fish with a healed adipose fin clip.

TABLE 7. Expected coastwide Oregon coastal natural (OCN) and Rogue/Klamath (RK) coho exploitation rates by fishery for Council-adopted ocean salmon fisheries, 2003. (Page 1 of 1)

Fishery	Exploitation Rate (Percent)	
	OCN	RK
	Total	Total
SOUTHEAST ALASKA	0.0	0.0
BRITISH COLUMBIA	0.0	0.0
PUGET SOUND/STRAITS	0.1	0.0
NORTH OF CAPE FALCON		
Treaty Indian Troll	0.9	0.0
Recreational	1.3	0.0
Non-Indian Troll	0.7	0.0
SOUTH OF CAPE FALCON		
Recreational:		
Cape Falcon to Humbug Mt.	3.9	0.2
Humbug Mt. OR/CA border (KMZ)	0.6	0.6
OR/CA border to Horse Mt. (KMZ)	1.2	3.3
Fort Bragg	0.7	1.3
South of Pt. Arena	0.6	1.0
Troll:		
Cape Falcon to Humbug Mt.	1.5	0.1
Humbug Mt. OR/CA border (KMZ)	0.0	0.0
OR/CA border to Horse Mt. (KMZ)	0.0	0.2
Fort Bragg	1.1	1.9
South of Pt. Arena	0.5	0.6
BUOY 10	0.3	0.0
ESTUARY/FRESHWATER	1.0	0.2
TOTAL	14.4	9.6

TABLE 8. Expected mark rates for Council-adopted ocean salmon fisheries with selective coho retention, 2003. (Page 1 of 1)

Area	Fishery	June	July	August	September	2002 Observed
North of Cape Falcon						
Neah Bay (Area 4)	Recreational	39%	57%	45%	52%	39%
	Non-Indian Troll	-	47%	47%	52%	NA
La Push (Area 3)	Recreational	64%	54%	64%	18%	28%
	Non-Indian Troll	-	55%	50%	71%	NA
Westport (Area 2)	Recreational	75%	74%	72%	74%	56%
	Non-Indian Troll	-	60%	70%	50%	NA
Columbia River (Area 1)	Recreational	89%	87%	83%	83%	58%
	Non-Indian Troll	-	77%	78%	77%	NA
Buoy 10	Recreational	-	-	81%	81%	74%
South of Cape Falcon						
Cape Falcon to Humbug Mt.	Recreational	-	-	-	-	56%
Tillamook	Recreational	80%	75%	67%	-	-
Newport	Recreational	77%	75%	68%	-	-
Coos Bay	Recreational	74%	71%	58%	-	-

TABLE 9. Estimates of **exvessel value** for Council-adopted 2003 non-Indian **commercial troll** regulations. (Page 1 of 1)

Management Area	Exvessel Value (thousands of dollars) ^{a/}				
	Projection for 2003 ^{b/}	Estimate for 2002	Percent Change from Estimated 2002 Values	1976-1990 Average ^{c/}	Percent Change from 1976-1990 Average
NORTH OF CAPE FALCON	1,368	1,228	11%	5,634	-76%
Cape Falcon to Humbug Mt.	2,044	4,837	-58%	14,997	-86%
Humbug Mt to Horse Mt.	444	421	6%	7,542	-94%
Horse Mt. to Pt. Arena	1,576	1,388	14%	6,998	-77%
South of Pt. Arena	7,492	5,975	25%	14,265	-47%
TOTAL SOUTH OF CAPE FALCON	11,557	12,621	-8%	43,802	-74%
WEST COAST TOTAL	12,925	13,849	-7%	49,436	-74%

a/ Exvessel values are not comparable to the community income impacts shown in Table 10.

b/ Dollar value estimates are based on expected catches in the management area, and 2002 exvessel prices and average weights per fish.

c/ All dollar values are adjusted to 2002 real values.

TABLE 10. Estimates of **angler trips** and coastal community **income** generated for the Council-adopted 2003 **recreational** ocean salmon fishery regulations compared to 2002 and the 1976-1990 average. (Page 1 of 1)

Management Area	Angler Trips (thousands)			Coastal Community Income ^{a/} Impacts (thousands of dollars)			Projected Percent Change in Income Impacts	
	Projection for 2003	Estimate for 2002	1976-1990 Average	Projection for 2003	Estimate for 2002	1976-1990 Average	Compared to 2002 Estimate	Compared to 1976-1990 Average
NORTH OF CAPE FALCON	128	106	271	7,806	6,462	15,787	21%	-51%
Cape Falcon to Humbug Mt.	113	72	184	5,815	3,701	9,899	57%	-41%
Humbug Mt. to Horse Mt.	81	39	117	3,854	1,851	5,755	108%	-33%
Horse Mt. to Pt. Arena	34	32	12	2,393	2,195	770	9%	211%
South of Pt. Arena	154	154	116	13,759	13,759	12,292	0%	12%
TOTAL S. OF CAPE FALCON	383	297	429	25,820	21,506	28,716	20%	-10%
WEST COAST TOTAL	511	403	701	33,627	27,967	44,503	20%	-24%

a/ Income impacts are totals for individual communities. Impacts between communities in the management area have not been counted. Income impacts are not comparable to the exvessel values shown in Table 9. All dollar values are adjusted to 2002 real values.

b/ The estimates for the number of trips south of Cape Falcon are based on comparison of the seasons proposed for 2003 to those in place in 2002 and the associated effort levels. The estimates for trips north of Cape Falcon are based on 2002 season retained chinook per angler during the summer season. If chinook harvest guidelines do not limit recreational effort, there may be enough coho available to support approximately twice the number of trips estimated for the north of Cape Falcon area (close to the 1976-1990 average).

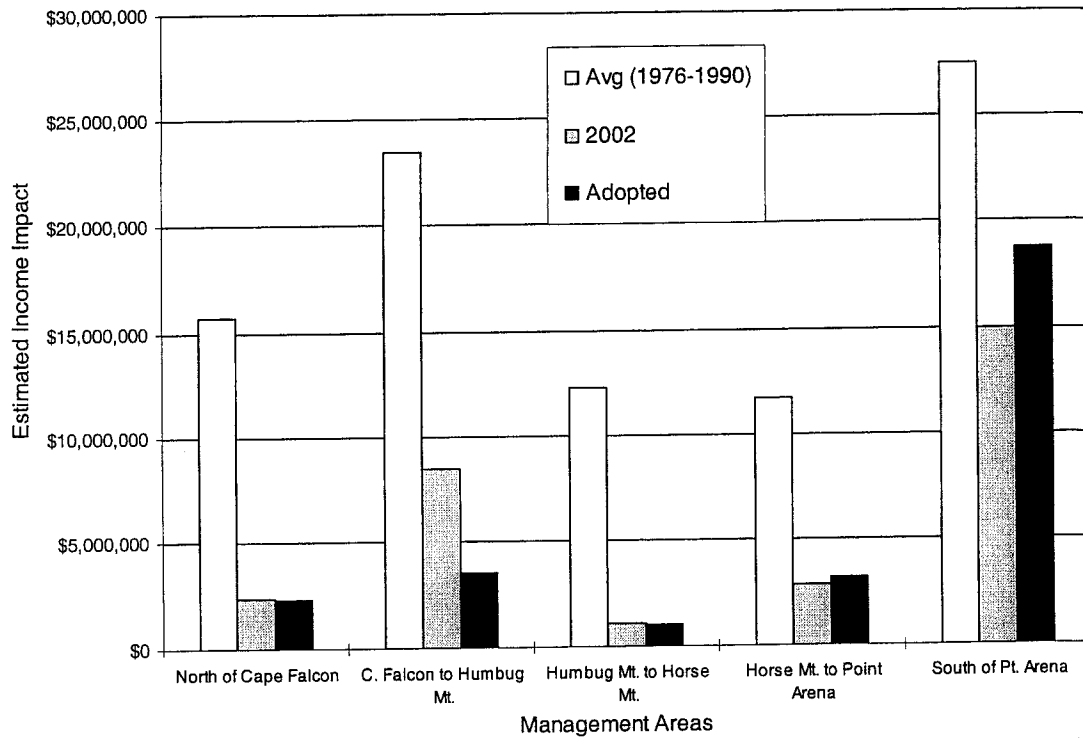


FIGURE 3. Projected coastal community income impacts associated with the 2003 commercial troll fishery under Council-adopted management measures compared to 2002 and the 1976-1990 average in real (inflation adjusted) dollars.

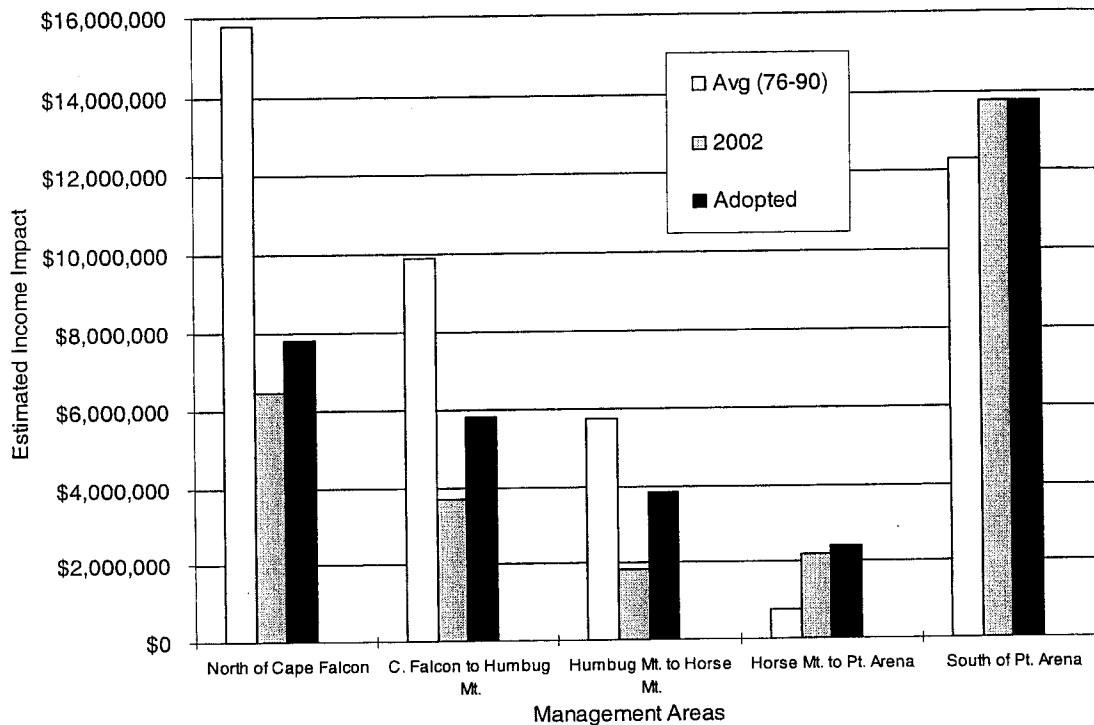


FIGURE 4. Projected coastal community income impacts associated with the 2003 recreational fishery under Council-adopted management measures compared to 2002 and the 1976-1990 average in real (inflation adjusted) dollars.

APPENDIX A

BIOLOGICAL EVALUATION OF 2003

COUNCIL OCEAN SALMON FISHERY IMPACTS ON FISH SPECIES LISTED UNDER THE ENDANGERED SPECIES ACT

INTRODUCTION

Amendment 12 to the Pacific Coast Salmon Fishery Management Plan (Salmon FMP) requires the Pacific Fishery Management Council (Council) to manage fisheries consistent with standards developed by the National Marine Fisheries Service (NMFS) regarding actions necessary to protect species listed under the Endangered Species Act (ESA). NMFS approved Amendment 14 on September 27, 2000, but it does not change the requirements of Amendment 12.

Since 1989, NMFS has listed 16 evolutionarily significant units (ESU) of salmon under the Endangered Species Act (ESA) (Table A-1). As the listings have occurred, NMFS has initiated formal section 7 consultations and issued biological opinions (Table A-2) that consider the impacts to listed salmonid species, and some salmonid species proposed for listing, resulting from proposed implementation of the Salmon FMP, or in some cases, from proposed implementation of the annual management measures. NMFS has also reinstituted consultation on certain ESUs when new information has become available on the status of the stocks or on the impacts of the Salmon FMP on the stocks. Some opinions have concluded that implementation of the Salmon FMP is not likely to jeopardize the continued existence of certain listed ESUs. Other opinions have found the Salmon FMP is likely to jeopardize certain listed ESUs, and have identified reasonable and prudent alternatives (consultation standards) that would avoid the likelihood of jeopardizing the continued existence of the ESU under consideration.

TABLE A-1. Salmon Evolutionarily Significant Units (ESUs) listed under the Endangered Species Act.

Species	ESU	Status	Federal Register Notice
Chinook Salmon (<i>O. tshawytscha</i>)	Sacramento River Winter	Endangered	54 FR 32085 8/1/89
	Snake River Fall	Threatened	57 FR 14653 4/22/92
	Snake River Spring/Summer	Threatened	57 FR 14653 4/22/92
	Puget Sound	Threatened	64 FR 14308 3/24/99
	Lower Columbia River	Threatened	64 FR 14308 3/24/99
	Upper Willamette River	Threatened	64 FR 14308 3/24/99
	Upper Columbia River Spring	Endangered	64 FR 14308 3/24/99
	Central Valley Spring	Threatened	64 FR 50394 9/16/99
	California Coastal	Threatened	64 FR 50394 9/16/99
Chum Salmon (<i>O. keta</i>)	Hood Canal Summer-Run	Threatened	64 FR 14508 3/25/99
	Columbia River	Threatened	64 FR 14508 3/25/99
Coho Salmon (<i>O. kisutch</i>)	Central California Coastal	Threatened	61 FR 56138 10/31/96
	S. Oregon/ N. California Coastal	Threatened	62 FR 24588 5/6/97
	Oregon Coastal	Threatened	63 FR 42587 8/10/98
Sockeye Salmon (<i>O. nerka</i>)	Snake River	Endangered	56 FR 58619 11/20/91
	Ozette Lake	Threatened	64 FR 14528 3/25/99

TABLE A-2. NMFS' Endangered Species Act consultations and section 4(d) determinations on ocean fisheries implemented under the Salmon FMP and their duration.

Date	Evolutionarily Significant Unit covered and effective period
March 8, 1996	Snake River chinook and sockeye (until reinitiated)
April 28, 1999	Oregon coastal coho, S. Oregon/ N. California coastal coho, Central California coastal coho (until reinitiated)
April 28, 2000	Central Valley spring chinook and California coastal chinook (until reinitiated)
April 27, 2001	Hood Canal summer chum 4(d) limit (until reinitiated)
April 30, 2001	Upper Columbia River spring chinook, Upper Willamette River chinook, Lower Columbia River chinook (until reinitiated)
April 30, 2001	Lower Columbia River chinook, Upper Willamette chinook, Upper Columbia spring chinook, Lake Ozette sockeye, ten steelhead ESUs and Columbia River chum (until reinitiated).
April 29, 2002	Sacramento River winter chinook (2 years)
Pending	Puget Sound chinook 4(d) limit

NMFS, in a March 7, 2003 letter to the Council, provided guidance on protective measures for listed species for the 2003 fishing season. The letter summarized the requirements of NMFS' biological opinions and 4(d) rules which are to be applied to the 2003 management season. The ESA consultation standards and the exploitation rate (or other criteria) projected for the 2003 management measures are presented in Table A-3. Some listed stocks are either rarely caught in Council fisheries (e.g. spring chinook from the upper Columbia and Willamette rivers) or already receive sufficient protection from Salmon FMP and ESA consultation standards for other listed ESUs (e.g. Central Valley spring chinook). NMFS has determined that management actions designed to limit catch from these ESUs beyond what will be provided by harvest constraints for other stocks are not necessary.

Additional listed salmonid ESUs that are found within the Council area, but which are not significantly impacted by Council managed fisheries, include:

Sockeye

Snake River (endangered) Ozette Lake Sockeye (threatened)

Chum

Columbia River (threatened) Hood Canal summer (threatened)

Steelhead

Southern California (endangered)	Central Valley, California (threatened)
South-central California coast (threatened)	Central California coast (threatened)
Upper Columbia River (endangered)	Upper Willamette River (threatened)
Middle Columbia River (threatened)	Lower Columbia River (threatened)
Snake River Basin (threatened)	Northern California (threatened)

TABLE A-3. STT preliminary analysis of impacts of tentatively-adopted 2003 management measures on Endangered Species Act (ESA) listed Evolutionarily Significant Units (ESUs).

ESU	Stock Representation in Salmon FMP	ESA Consultation Standard		2003 Management Measures	
Central Valley spring chinook - threatened	Sacramento River spring	No guidance in addition to the ESA consultation standard for Sacramento winter chinook		Delay opening the recreational fishery between Pt. Arena and Pigeon Pt. until April 12 and between Pigeon Pt and the U.S.-Mexico border until March 29.	
Sacramento River winter chinook - endangered	Sacramento River winter	The duration and timing of 2003 commercial and recreational fisheries south of Point Arena not change substantially relative to 2000 and 2001.		Delay opening the recreational fishery between Pt. Arena and Pigeon Pt. until April 12 and between Pigeon Pt and the U.S.-Mexico border until March 29.	
California Coastal chinook - threatened	Eel, Mattole, and Mad Rivers	≤ 16% age-4 ocean harvest rate on Klamath River fall chinook.		16% age-4 ocean harvest rate	
Lower Columbia River chinook - threatened	<ul style="list-style-type: none"> • Cowlitz, Kalama, Lewis spring • Lower River Hatchery fall • North Fork Lewis River fall 	<ul style="list-style-type: none"> • No specific requirements • Brood year adult equivalent exploitation rate on Coweeman tule fall chinook ≤ 49%. • 5,700 MSY level adult spawning escapement 		Meet hatchery escapement goals 47.0% Total ocean and freshwater AEQ exploitation rate. 23,400 adults to the Columbia River mouth.	
Upper Willamette chinook - threatened	Upper Willamette River spring	No specific requirements. Rare occurrence in Council fisheries		North of Falcon troll fisheries do not begin prior to May 1	
Upper Columbia River spring chinook - endangered	Upper Columbia River spring	No specific requirements. Rare occurrence in Council fisheries		North of Falcon troll fisheries do not begin prior to May 1	
Snake River fall chinook - threatened	Snake River fall	≥ 30% reduction from the 1988-1993 average adult equivalent age-3/age-4 exploitation rate for all ocean fisheries		33% reduction from 1988-1993 average age 3/4 AEQ ocean exploitation rate	
Snake River spring/summer chinook - threatened	Snake River spring/summer	No specific requirements. Rare occurrence in Council fisheries		North of Falcon troll fisheries do not begin prior to May 1	
Puget Sound chinook - threatened ¹	<ul style="list-style-type: none"> • Nooksack spring • Skagit summer/fall • Skagit spring • Stillaguamish summer/fall • Snohomish summer/fall • Lake Wash. summer/fall • White River spring • Green River summer/fall • Puyallup summer/fall • Nisqually summer/fall • Skokomish summer/fall • Mid-Hood Canal fall • Dungeness spring • Elwha summer/fall 	Exploitation Rate <ul style="list-style-type: none"> • 7% So U.S. • 49% Total • 30% Total • 24% Total • 24% Total • 31% Total • 20% Total • 53% Total • 55% Total • NA • NA • 29% So U.S. • 23% Total • 23% Total 	Spawner Escapement 5,500 1,100 1,200	Exploitation Rate 7% 50% 24% 18% 21% 31% 19% 56% 50% 29% 23% 23%	Spawner Escapement 399 11,639 1,135 2,322 5,072 311 1,501 6,884 2,433 1,107 1,349 531 351
Central California Coast coho - threatened	Not yet represented	No retention of coho in commercial and recreational fisheries off California.		No retention of coho in California fisheries	
S. Oregon/N. California Coastal coho - threatened	<ul style="list-style-type: none"> • S. Oregon coast natural • Northern California 	≤ 13% marine exploitation rate on Rogue/Klamath hatchery coho.		9.6% marine exploitation rate	
Oregon Coast coho - threatened	<ul style="list-style-type: none"> • S. Central OR coast • N. Central OR coast • N. Oregon coast natural 	13%-35% (15% in 2003) combined marine/freshwater exploitation rate, depending on parent escapement and ocean survival trends (Amendment 13)		14.4% Marine and freshwater exploitation rate	

1. NMFS has determined the overall impact to the ESU is consistent with their preliminary 4(d) determination. Ultimately, fisheries will have to be managed consistent with their final 4(d) determination.

